# The Contextual Turn: from Context-Aware to Context-Driven

Presented by Roberto Pagano at RecSys 2016

Summarized by Igor Balagula

Many currently-used recommender algorithms rely heavily on the information about user’s past behavior without taking into consideration the context in which a user interacts with a system. In fact, people are likely to have more in common with other people in a similar contextual situation than they have with their past selves. Contextual information should not only be considered while making recommendations but should become a driving force of recommendations.

Let’s consider an example. I am scheduled to attend a conference in Boston and am looking for a hotel. Hotel recommender sites may be able to recognize that my needs are more similar to need of other people attending the same conference then my own needs in the past when I came for a weekend getaway. In such situations context can be viewed as a combination of situation (what is going on around the user) and intent (what the user is trying to accomplish).

Context-driven systems are able to produce recommendations without the past history of the individual user. This helps to circumvent the Cold Start problem. Moreover it allows exploiting the past history of other users with the same context.

Context-driven recommenders allow to decouple context exploitation from personalization. Both approaches can be used in tandem in order to improve quality of recommendations but either one can be used by itself when the other approach does not have enough information (e.g. Cold Start).

Context-driven recommenders can leverage huge amount of contextual data available through the online ecosystem. Such data may include web logs, cookies, type of search and keywords used by the user, behavior of users with a similar online profile, etc. This is especially important if we want to be able to make recommendations to anonymous users, those who have not revealed any identifiable information.

Another advantage of context-driven recommendations is that the system may generate different recommendations even if user’s profile hasn’t changed. This would not be the case if the recommender algorithm relies heavily on personalization. Such recommenders will likely to produce similar recommendations if the profile does not change.